

CONTENTS

Preface	
H. Chen (Wuhan, China) and G.A.E. Gall (Davis, CA, USA)	1
First Honorable Member of IAGA, Valentin Sergeevich Kirpichnikov	3
Acceptance speech	
V.S. Kirpichnikov	6
Selection of Krasnodar common carp (<i>Cyprinus carpio</i> L.) for resistance to dropay: principal results and prospects	
V.S. Kirpichnikov (St. Petersburg, Russia), Ju.I. Ilyasov, L.A. Shart, A.A. Vikhman, M.V. Ganchenko, A.L. Ostashevsky, V.M. Simonov, G.F. Tikhonov (Moscow Province, Russia) and V.V. Tjurin (Krasnodar, Russia)	7
Notes on mariculture in China	
C.K. Tseng (Qingdao, China)	21
Transgenic fish — gene transfer to increase disease and cold resistance	
Y. Jiang (Beijing, China)	31
Advances in fish cell engineering in China	
R. Lu and H. Chen (Wuhan, China)	41
Growth and stress in fish production	
A.D. Pickering (Ambleside, UK)	51
Genetic improvement of disease resistance in fish: an overview	
K.T. Fjalestad, T. Gjedrem and B. Gjerde (Ås, Norway)	65
Estimating genetic change from selection	
G.A.E. Gall, Y. Bakar and T. Famula (Davis, CA, USA)	75
Genetic structure of <i>Penaeus monodon</i> in Australia: concordant results from mtDNA and allozymes	
J.A.H. Benzie, E. Ballment and S. Frusher (Townsville, Qld., Australia)	89
Geographic variability in the grey mullet <i>Mugil cephalus</i> : preliminary results of mtDNA and chromosome analyses	
D. Crosetti (Rome, Italy), J.C. Avise (Athens, GA, USA), F. Placidi, A.R. Rossi and L. Sola (Rome, Italy)	95
Morphometric and biochemical genetic variation of the mitten crab, <i>Eriocheir</i> , in southern China	
G. Li, Q. Shen and Z. Xu (Guangzhou, China)	103
Variation in morphology and biochemical genetic markers among populations of blunt snout bream (<i>Megalobrama amblycephala</i>)	
S. Li, W. Cai and B. Zhou (Shanghai, China)	117
Study on the blood type factors in red crucian carp (<i>Carassius auratus</i> var.)	
J. Tong and C. Wu (Wuhan, China)	129
Genetic breeding and seedling raising experiments with <i>Porphyra</i> protoplasts	
J. Dai, Q. Zhang and Z. Bao (Qingdao, China)	139
Preductibility of individual growth rates in tilapia	
M.S. Palada-de Vera and A.E. Eknath (Metro Manila, Philippines)	147
Growth and reproduction of individually tagged Nile tilapia (<i>Oreochromis niloticus</i>) of different strains	
R.B. Bolivar (Nueva Ecija, Philippines), A.E. Eknath (Metro Manila, Philippines), H.L. Bolivar and T.A. Abella (Nueva Ecija, Philippines)	159

Genetic improvement of farmed tilapias: the growth performance of eight strains of <i>Oreochromis niloticus</i> tested in different farm environments A.E. Eknath (Metro Manila, Philippines), M.M. Tayamen (Nueva Ecija, Philippines), M.S. Palada-de Vera (Metro Manila, Philippines), J.C. Danting, R.A. Reyes, E.E. Dionisio (Nueva Ecija, Philippines), J.B. Capili (Metro Manila, Philippines), H.L. Bolivar, T.A. Abella, A.V. Circa (Nueva Ecija, Philippines), H.B. Bentsen, B. Gjerde, T. Gjedrem (Ås-NLH, Norway) and R.S.V. Pullin (Metro Manila, Philippines)	171
Effect of growth hormone on the growth rate of the gilthead seabream (<i>Sparus aurata</i>), and use of different constructs for the production of transgenic fish B. Cavari, B. Funkenstein (Haifa, Israel), T.T. Chen, L.I. Gonzalez-Villasenor (Baltimore, MD, USA) and M. Scharf (Wurzburg, Germany)	189
Expression of chinook salmon growth hormone gene in <i>E. coli</i> S. Song, T. Zhang, W. Zhao, W. Qi, W. Hu, P. Wang (Tianjin, China) and C.L. Hew (Toronto, Ont., Canada)	199
Gene transfer via electroporation in fish Y. Xie, D. Liu, J. Zou, G. Li and Z. Zhu (Wuhan, Hubei, China)	207
Development of a heavy metal-inducible fish-specific expression vector for gene transfer in vitro and in vivo Y. Hong, C. Winkler (Martinsried, Germany), G. Brem (München, Germany) and M. Scharf (Martinsried, Germany)	215
Chromosome-set manipulation in tilapia — techniques, problems and prospects G.C. Mair (Swansea, UK)	227
Growth of the induced triploid pearl oyster, <i>Pinctada martensii</i> (D.) W. Jiang, G. Li, G. Xu, Y. Lin and N. Qing (Guangzhou, China)	245
An artificial multiple triploid carp and its biological characteristics C. Wu, Y. Ye, R. Chen and X. Liu (Wuhan, China)	255
Suppression of first cleavage in the Nile tilapia, <i>Oreochromis niloticus</i> L. — a comparison of the relative effectiveness of pressure and heat shocks M.G. Hussain, D.J. Penman, B.J. McAndrew (Stirling, UK) and R. Johnstone (Aberdeen, UK)	263
Gynogenesis in common carp (<i>Cyprinus carpio</i>). IV. Growth, phenotypic variation and gonad differentiation in normal and methyltestosterone-treated homozygous clones and F ₁ hybrids J. Komen, E.H. Eding, A.B.J. Bongers and C.J.J. Richter (Wageningen, Netherlands)	271
Induced diploid gynogenesis and polyploidy in ornamental (koi) carp, <i>Cyprinus carpio</i> L. 2. Timing of heat shock during the first cleavage N.B. Cherfas, G. Hulata and O. Kozinsky (Mobile Post Hof Hacarmel, Israel)	281
Poster Session Abstracts	291
Author Index	329

